

CLAIMS

1. A method implemented in a computer system for presenting biomolecular sequence data, comprising:

retrieving biomolecular sequence data from a database in response to a user

5 query; and

graphically depicting elements of the biomolecular sequence data in a user interface for said computer system.

2. The method of claim 1, wherein said graphical depiction comprises a plurality of panels.

10 3. The method of claim 2, wherein said plurality of panels are comprised within a single frame.

4. The method of claim 3, wherein said plurality of panels provide graphical depictions representing different aspects of said biomolecular sequence data.

15 5. The method of claim 4, wherein said biomolecular sequence data comprises gene locus data.

6. The method of claim 5, wherein said plurality of panels comprises three panels.

7. The method of claim 6, wherein said three panels comprise a first panel graphically depicting at least a portion of a contig and its associated loci, a second
20 panel graphically depicting at least a portion of the contig depicted in said first panel

and annotated loci associated with the portion, and a third panel graphically depicting information indicating the number of sequencing operations conducted to determine the sequence data depicted in the second panel.

8. The method of claim 7, wherein said third panel graphically depicts sequences
5 used to assemble the portion of the contig depicted in the second panel.

9. The method of claim 7, wherein said third panel graphically depicts depth of coverage information for the portion of the contig depicted in the second panel.

10. The method of claim 1, wherein said method is implemented in Java programming language.

10 11. A method implemented in a computer system for presenting biomolecular sequence data, comprising:

retrieving biomolecular sequence data for a plurality of homologous loci from a database in response to a user query; and

graphically depicting at least some of the homologous loci in a user interface
15 for said computer system.

12. The method of claim 11, wherein said graphical depiction comprises a single panel.

13. A computer system, comprising:

a database including biomolecular sequence data;

20 a user interface capable of

receiving a query relating to the biomolecular sequence data, and

graphically displaying the results of said query.

14. The system of claim 13, wherein said graphical depiction comprises a plurality of panels.

5 15. The system of claim 14, wherein said plurality of panels are comprised within a single frame.

16. The system of claim 15, wherein said plurality of panels provide graphical depictions representing different aspects of said biomolecular sequence data.

10 17. The system of claim 16, wherein said biomolecular sequence data comprises gene locus data.

18. The system of claim 17, wherein said gene locus data is depicted in three panels comprising a first panel graphically depicting at least a portion of a contig and its associated loci, a second panel graphically depicting at least a portion of the contig depicted in said first panel and annotated loci associated with the portion, and a third
15 panel graphically depicting information indicating the number of sequencing operations conducted to determine the sequence data depicted in the second panel.

19. The system of claim 18, wherein said third panel graphically depicts depth of coverage information for the portion of the contig depicted in the second panel.

20. A computer-readable medium containing programmed instructions arranged to
20 graphically display biomolecular sequence data, the computer-readable medium including programmed instructions for:

**retrieving biomolecular sequence data from a computer system database in
response to a user query; and**

**graphically depicting elements of the biomolecular sequence data in a user
interface for the computer system.**

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